

FIG 2

000000-000000

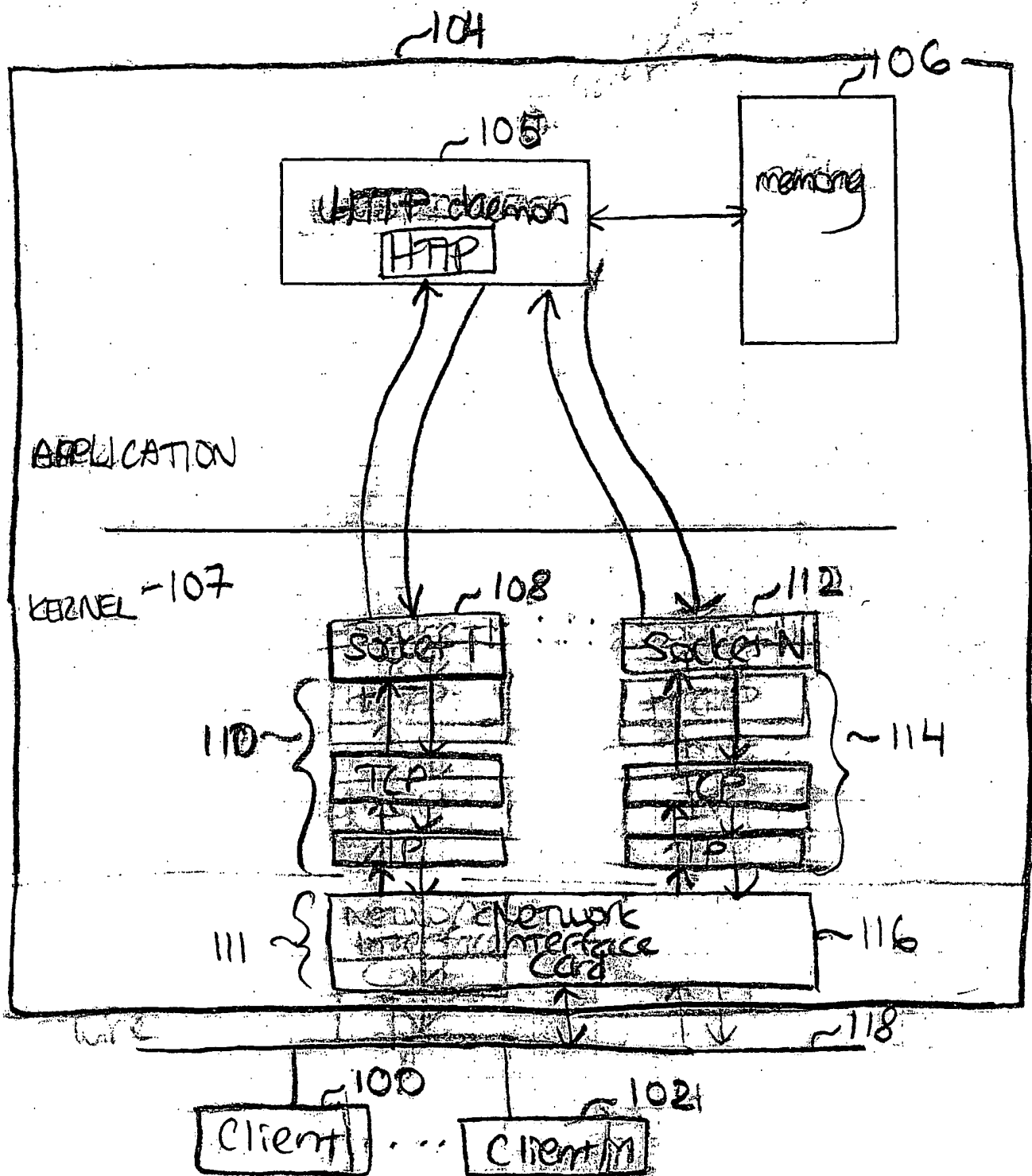
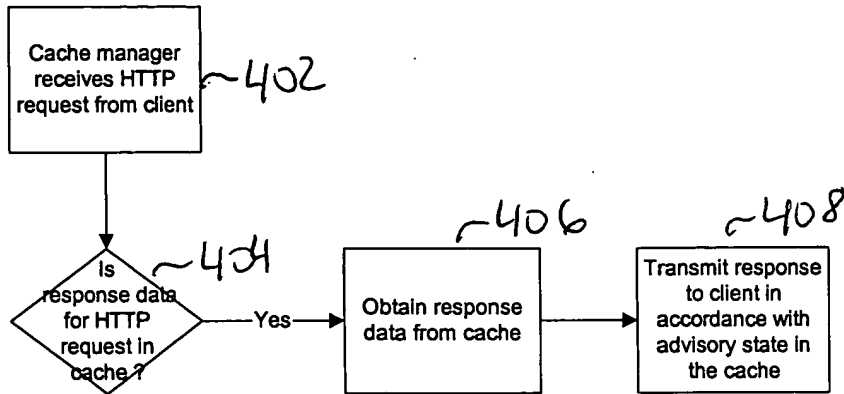
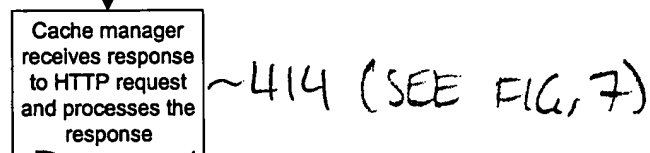
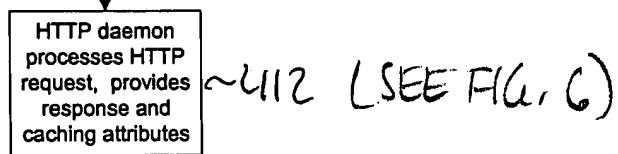
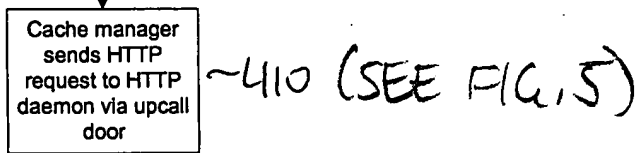


FIG. 1





SEE FIG. 8



In accordance with the caching attributes

FIG. 4

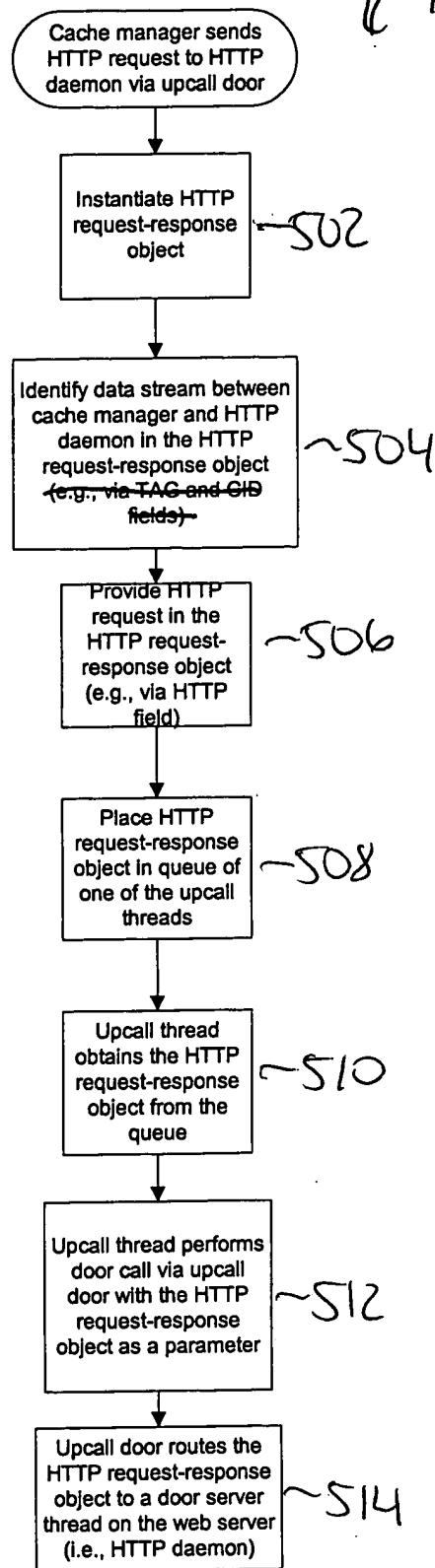


FIG. 5

HTTP daemon  
web server processes  
HTTP request and  
provides response and  
caching attributes

412

Door server thread  
on the web server  
(i.e., HTTP  
daemon) receives  
the HTTP request-  
response object

~602

Door server thread  
processes HTTP  
request

~604

Door server thread  
places HTTP  
response data in  
the HTTP request-  
response object

~606

Door server thread  
initializes caching  
attributes in the HTTP  
request-response object:  
1) ADVISORY = FALSE  
2) NOCACHE = TRUE  
3) Optional: CTAG =  
unique identifier

~608

Door server thread  
performs door return  
returning to the upcall  
thread

~610

Upcall thread that performed  
door call via upcall door  
resumes processing upon  
door return and calls cache  
manager with HTTP request-  
response object as  
parameter

~612

FIG. 6

414

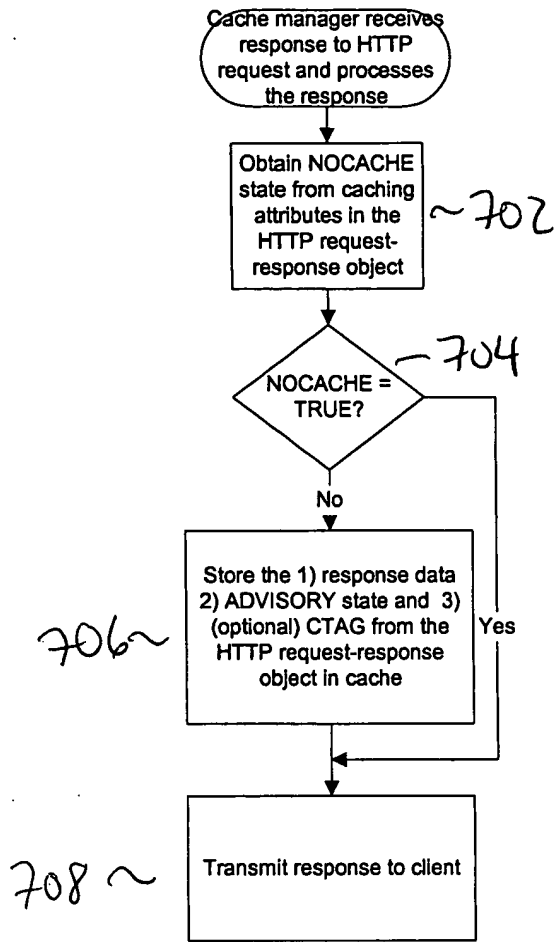


FIG. 7

Transmit response to client  
in accordance with advisory  
state in cache

From Block 408 of FIG. 4

ADVISORY =  
TRUE?

No

Transmit response  
data to client

Yes

Instantiate HTTP  
request-response  
object with  
ADVISORY =  
TRUE

Place HTTP  
request-response  
object in queue of  
one of the upcall  
threads

Upcall thread  
obtains the HTTP  
request-response  
object from the  
queue

Upcall thread performs door  
call via upcall door with the  
HTTP request-response  
object as a parameter

Door server thread  
on web server  
processes HTTP  
request as advise  
HTTP request

Upon door return, the upcall  
thread that performed the door  
call via upcall door resumes  
processing and calls cache  
manager with HTTP request-  
response object as parameter

Cache manager determines  
response data based upon  
ADVISE state in the HTTP  
request-response object

FIG. 8



814

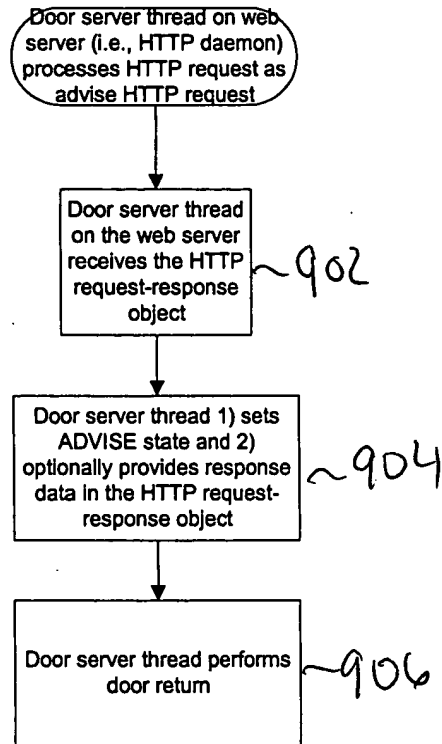


FIG. 9

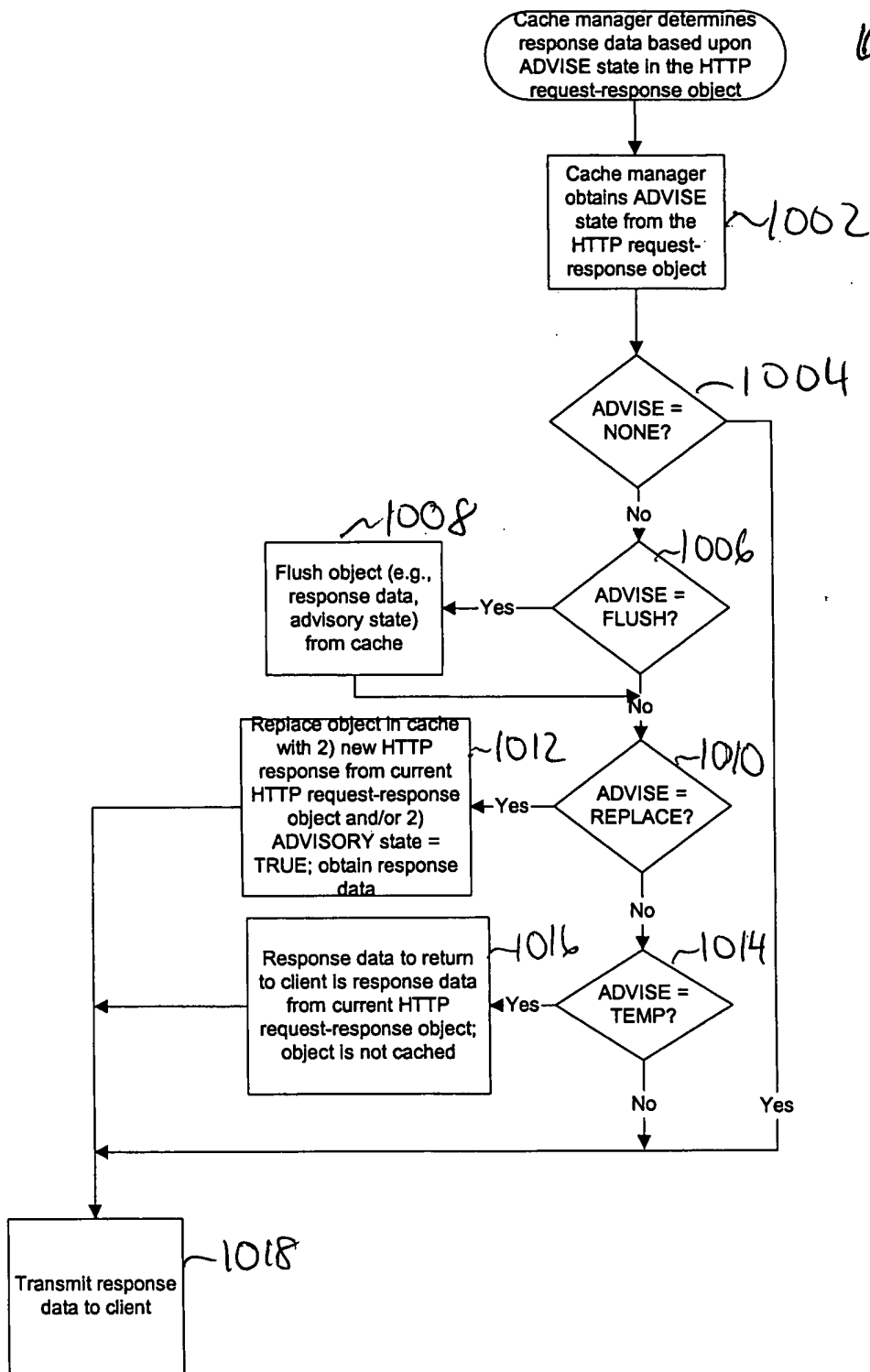


FIG. 10

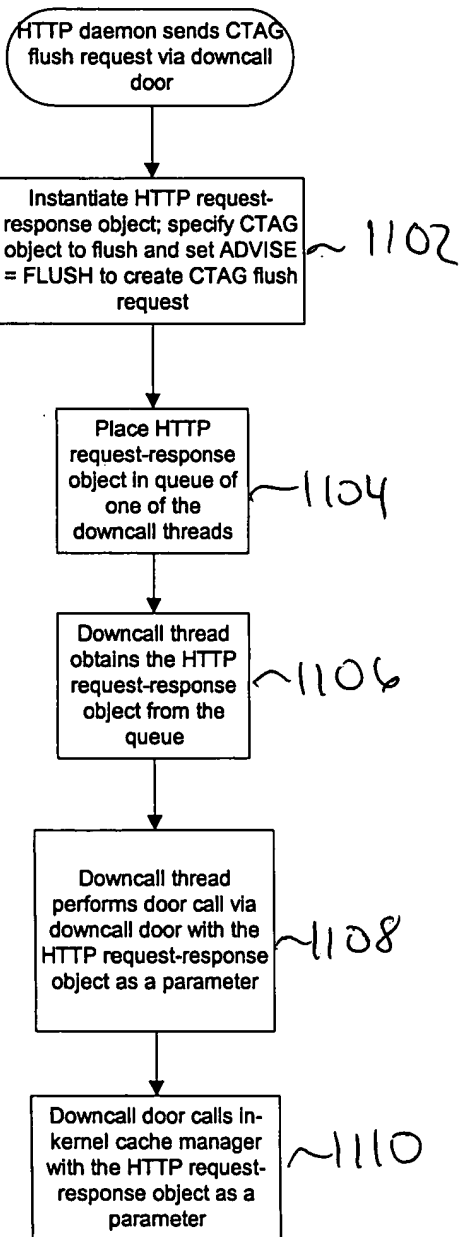


FIG. 11

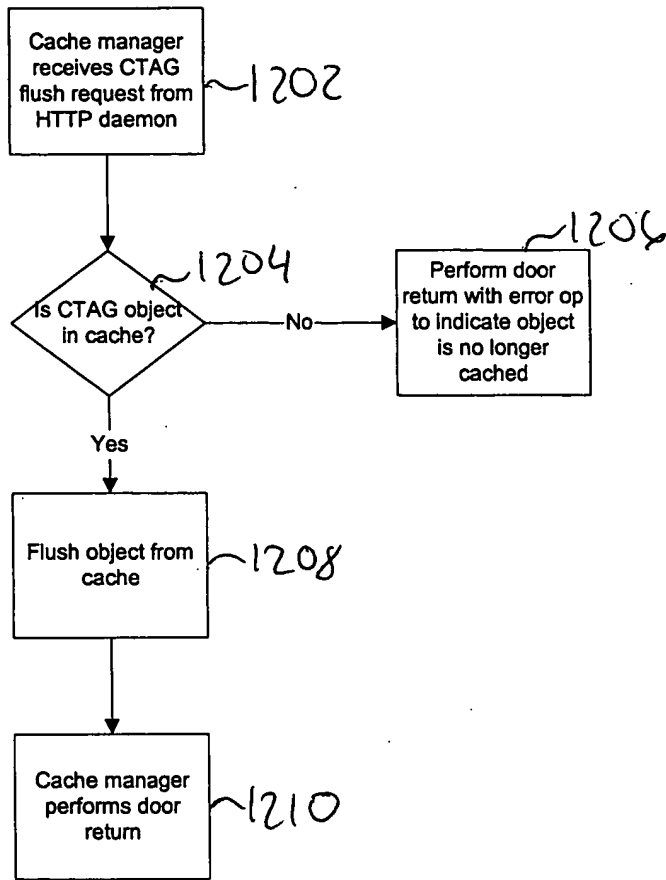


FIG. 12

## In-kernel cache

Request code	Response data	Advisory state	CTAG
URL1	data1	TRUE	100
URL2	data2	FALSE	832
URL3	data3	FALSE	100
URL4	data4	FALSE	0
URL5	data5	TRUE	0

FIG. 93

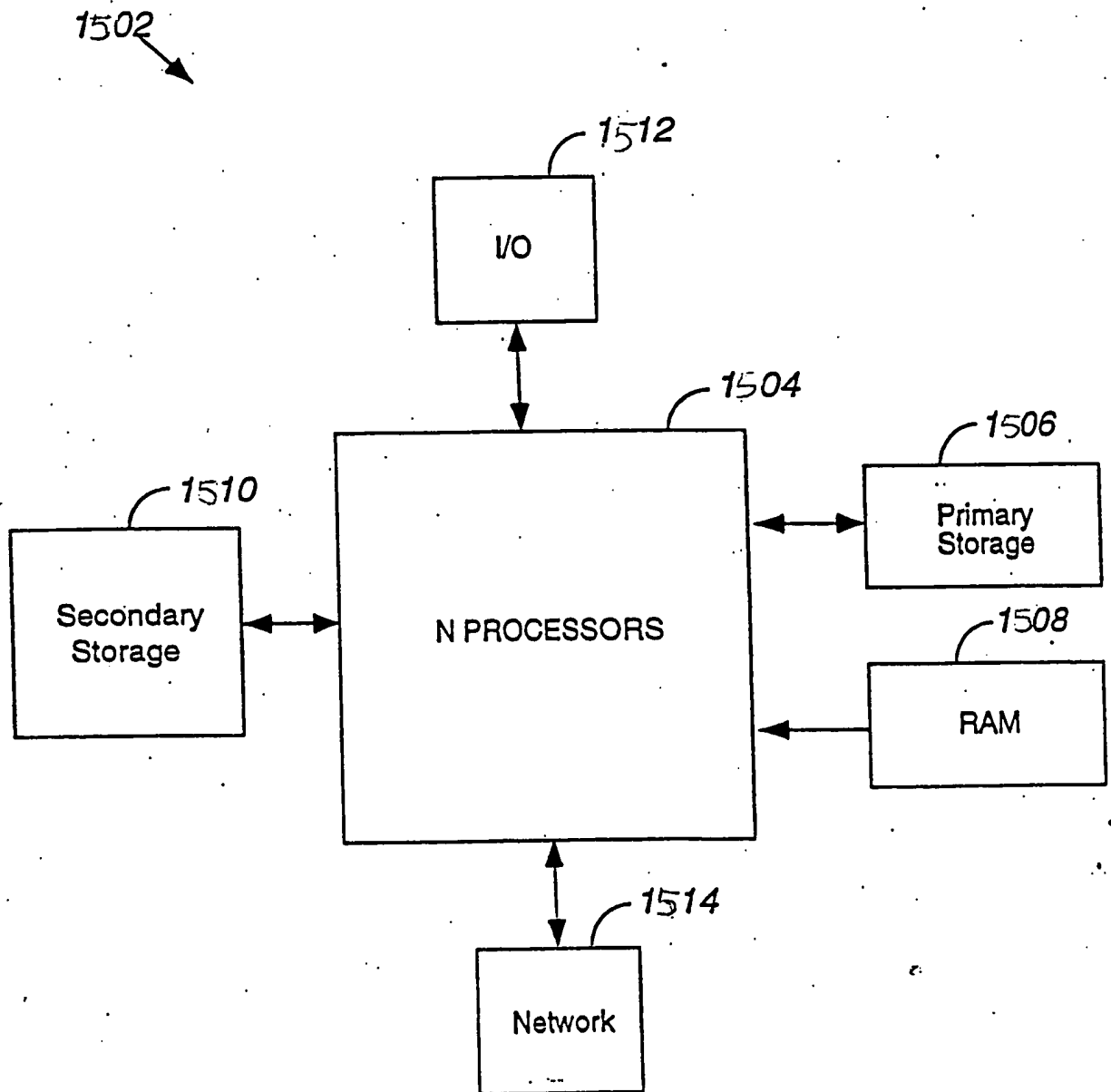


Figure 14